

CLAIMS

What is claimed is:

1. A computing device to allow for the selection and display of a multimedia presentation of an audio file to a user and to allow the user to play a musical instrument in conjunction with the multimedia presentation, wherein an interface device couples the musical instrument to the computing device by performing analog to digital conversion of the musical instrument's analog audio signal to create a digitized audio signal and a server transmits a session file associated with a musical piece to the computing device through a computer network, the session file including an audio file and multimedia data, the computing device comprising:
 - 9 a communication device to:
 - 10 transmit a user's request for the selection of a musical piece to the server; and
 - 11 receive the session file associated with the selected musical piece from the
 - 12 server; and
 - 13 a processor to:
 - 14 process the session file such that the computing device presents a multimedia presentation of the audio file to the user; and
 - 15 process the digitized audio signal of the musical instrument so that the user can play the musical instrument in conjunction with the multimedia presentation of the audio file.
1. The computing device of claim 1, wherein the processor further creates and causes the display of a control panel graphical interface for the musical instrument, the control panel graphical interface having settings that define sound characteristics for the musical instrument.
1. The computing device of claim 2, wherein the control panel graphical interface allows the user to set the sound characteristics for the musical instrument.
1. The computing device of claim 2, wherein, in response to the multimedia data of the session file, further comprising setting the control panel graphical interface to pre-

3 defined values to model the sound characteristics of the musical instrument associated with
4 the audio file for the musical piece selected by the user.

1 5. The computing device of claim 1, wherein a track associated with the user's
2 musical instrument is removed from the audio file for the musical piece selected by the user
3 such that the user can play the user's musical instrument in conjunction with a multimedia
4 presentation of the audio file that does not include the user's musical instrument.

1 6. The computing device of claim 1, further comprising displaying music
2 notation associated with the audio file of the musical piece selected by the user in the
3 multimedia presentation to the user.

1 7. The computing device of claim 1, wherein the server identifies the user based
2 upon a unique identifier.

1 8. The computing device of claim 7, wherein the unique identifier is a serial
2 number.

1 9. The computing device of claim 7, further comprising displaying a presentation
2 of musical pieces tailored to the user based upon the unique identifier.

1 10. The computing device of claim 7, wherein the interface device stores a user
2 key associated with the interface device.

1 11. The computing device of claim 10, wherein the audio file transmitted from the
2 server to the computing device of the user is encrypted with an audio file key associated with
3 the audio file and the audio file key is encrypted with a user key for the user and is also
4 transmitted to the computing device.

1 12. The computing device of claim 11, wherein the interface device decrypts the
2 audio file key that is encrypted with the user key using the stored user key and transmits the
3 decrypted audio file key to the computing device, further comprising:

4 decrypting the audio file with the audio file key.

1 13. The computing device of claim 1, wherein the musical instrument is a
2 microphone.

1 14. The computing device of claim 1, wherein the musical instrument is a guitar.

1 15. The computing device of claim 14, wherein the processor further creates and
2 causes the display a control panel graphical interface including an amplifier for a guitar, the
3 control panel graphical interface having settings that define sound characteristics for the
4 guitar.

1 16. The computing device of claim 15, in response to the multimedia data of the
2 session file, further comprising setting the control panel graphical interface to pre-defined
3 values to model the sound characteristics of the guitar associated with the audio file for the
4 musical piece selected by the user.

1 17. The computing device of claim 16, wherein a guitar track is removed from the
2 audio file for the musical piece selected by the user such that the user can play the user's
3 guitar in conjunction with a multimedia presentation of the audio file that does not include
4 the guitar track.

1 18. The computing device of claim 17, further comprising displaying music
2 notation for a guitar associated with the audio file of the musical piece selected by the user in
3 the multimedia presentation to the user

1 19. A computer-readable medium having stored thereon instructions executable by
2 a computing device, the computing device to allow for the selection and display of a
3 multimedia presentation of an audio file to a user and to allow the user to play a musical
4 instrument in conjunction with the multimedia presentation, wherein an interface device
5 couples the musical instrument to the computing device by performing analog to digital
6 conversion of the musical instrument's analog audio signal to create a digitized audio signal
7 and a server transmits a session file associated with a musical piece to the computing device
8 through a computer network, the session file including an audio file and multimedia data, the
9 instructions when executed by the computing device, cause the computing device to perform
10 the following operations comprising:

11 transmitting a user's request for the selection of a musical piece to the server;

12 receiving the session file associated with the selected musical piece from the server;

13 processing the session file such that the computing device presents a multimedia

14 presentation of the audio file to the user; and

15 processing the digitized audio signal of the musical instrument so that the user can

16 play the musical instrument in conjunction with the multimedia presentation of the audio file.

1 20. The computer-readable medium of claim 19, further comprising creating and

2 displaying a control panel graphical interface for the musical instrument, the control panel

3 graphical interface having settings that define sound characteristics for the musical

4 instrument.

1 21. The computer-readable medium of claim 20, wherein the control panel

2 graphical interface allows the user to set the sound characteristics for the musical instrument.

1 22. The computer-readable medium of claim 20, in response to the multimedia

2 data of the session file, further comprising setting the control panel graphical interface to pre-

3 defined values to model the sound characteristics of the musical instrument associated with

4 the audio file for the musical piece selected by the user.

1 23. The computer-readable medium of claim 19, wherein a track associated with

2 the user's musical instrument is removed from the audio file for the musical piece selected by

3 the user such that the user can play the user's musical instrument in conjunction with a

4 multimedia presentation of the audio file that does not include the user's musical instrument.

1 24. The computer-readable medium of claim 19, further comprising displaying

2 music notation associated with the audio file of the musical piece selected by the user in the

3 multimedia presentation to the user.

1 25. The computer-readable medium of claim 19, wherein the server identifies the

2 user based upon a unique identifier.

1 26. The computer-readable medium of claim 25, wherein the unique identifier is a
2 serial number.

1 27. The computer-readable medium of claim 25, further comprising displaying a
2 presentation of musical pieces tailored to the user based upon the unique identifier.

1 28. The computer-readable medium of claim 25, wherein the interface device
2 stores a user key associated with the interface device.

1 29. The computer-readable medium of claim 28, wherein the audio file
2 transmitted from the server to the computing device of the user is encrypted with an audio file
3 key associated with the audio file and the audio file key is encrypted with a user key for the
4 user and is also transmitted to the computing device.

1 30. The computer-readable medium of claim 29, wherein the interface device
2 decrypts the audio file key that is encrypted with the user key using the stored user key and
3 transmits the decrypted audio file key to the computing device, further comprising:

4 decrypting the audio file with the audio file key.

1 31. The computer-readable medium of claim 19, wherein the musical instrument
2 is a microphone.

1 32. The computer-readable medium of claim 19, wherein the musical instrument
2 is a guitar.

1 33. The computer-readable medium of claim 32, further comprising creating and
2 displaying a control panel graphical interface including an amplifier for a guitar, the control
3 panel graphical interface having settings that define sound characteristics for the guitar.

1 34. The computer-readable medium of claim 33, in response to the multimedia
2 data of the session file, further comprising setting the control panel graphical interface to pre-
3 defined values to model the sound characteristics of the guitar associated with the audio file
4 for the musical piece selected by the user.

1 35. The computer-readable medium of claim 34, wherein a guitar track is removed
2 from the audio file for the musical piece selected by the user such that the user can play the
3 user's guitar in conjunction with a multimedia presentation of the audio file that does not
4 include the guitar track.

1 36. The computer-readable medium of claim 35, further comprising displaying
2 music notation for a guitar associated with the audio file of the musical piece selected by the
3 user in the multimedia presentation to the user

1 37. A method to allow for the selection and display of a multimedia presentation
2 of an audio file to a user and to allow the user to play a musical instrument in conjunction
3 with the multimedia presentation, wherein an interface device couples the musical instrument
4 to a computing device by performing analog to digital conversion of the musical instrument's
5 analog audio signal to create a digitized audio signal and a server transmits a session file
6 associated with a musical piece to the computing device through a computer network, the
7 session file including an audio file and multimedia data, the method comprising:

8 transmitting a user's request for the selection of a musical piece to the server;
9 receiving the session file associated with the selected musical piece from the server;
10 processing the session file such that the computing device presents a multimedia
11 presentation of the audio file to the user; and

12 processing the digitized audio signal of the musical instrument so that the user can
13 play the musical instrument in conjunction with the multimedia presentation of the audio file.

1 38. The method of claim 37, further comprising creating and displaying a control
2 panel graphical interface for the musical instrument, the control panel graphical interface
3 having settings that define sound characteristics for the musical instrument.

1 39. The method of claim 38, wherein the control panel graphical interface allows
2 the user to set the sound characteristics for the musical instrument.

1 40. The method of claim 38, in response to the multimedia data of the session file,
2 further comprising setting the control panel graphical interface to pre-defined values to model
3 the sound characteristics of the musical instrument associated with the audio file for the
4 musical piece selected by the user.

1 41. The method of claim 37, wherein a track associated with the user's musical
2 instrument is removed from the audio file for the musical piece selected by the user such that
3 the user can play the user's musical instrument in conjunction with a multimedia presentation
4 of the audio file that does not include the user's musical instrument.

1 42. The method of claim 37, further comprising displaying music notation
2 associated with the audio file of the musical piece selected by the user in the multimedia
3 presentation to the user.

1 43. The method of claim 37, wherein the server identifies the user based upon a
2 unique identifier.

1 44. The method of claim 43, wherein the unique identifier is a serial number.

1 45. The method of claim 43, further comprising displaying a presentation of
2 musical pieces tailored to the user based upon the unique identifier.

1 46. The method of claim 43, wherein the interface device stores a user key
2 associated with the interface device.

1 47. The method of claim 46, wherein the audio file transmitted from the server to
2 the computing device of the user is encrypted with an audio file key associated with the audio
3 file and the audio file key is encrypted with a user key for the user and is also transmitted to
4 the computing device.

1 48. The method of claim 47, wherein the interface device decrypts the audio file
2 key that is encrypted with the user key using the stored user key and transmits the decrypted
3 audio file key to the computing device, further comprising:

4 decrypting the audio file with the audio file key.

1 49. The method of claim 37, wherein the musical instrument is a microphone.

1 50. The method of claim 37, wherein the musical instrument is a guitar.

1 51. The method of claim 50, further comprising creating and displaying a control
2 panel graphical interface including an amplifier for a guitar, the control panel graphical
3 interface having settings that define sound characteristics for the guitar.

1 52. The method of claim 51, in response to the multimedia data of the session file,
2 further comprising setting the control panel graphical interface to pre-defined values to model
3 the sound characteristics of the guitar associated with the audio file for the musical piece
4 selected by the user.

1 53. The method of claim 52, wherein a guitar track is removed from the audio file
2 for the musical piece selected by the user such that the user can play the user's guitar in
3 conjunction with a multimedia presentation of the audio file that does not include the guitar
4 track.

1 54. The method of claim 53, further comprising displaying music notation for a
2 guitar associated with the audio file of the musical piece selected by the user in the
3 multimedia presentation to the user.